



Indiana Department of Environmental Management  
Office of Air Management  
**Rule Fact Sheet**  
February 2, 2000

**DEVELOPMENT OF NEW RULES AND AMENDMENTS TO RULES CONCERNING  
NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR  
SECONDARY LEAD SMELTERS  
#96-5(APCB)**

**Overview**

This rulemaking revises 326 IAC 15-1-2 concerning source-specific lead emission limitations and 326 IAC 15-1-3 concerning control of fugitive lead dust. The rulemaking also adds a new rule, 326 IAC 20-13, to incorporate the national emissions standards for hazardous air pollutants (NESHAP) for secondary lead smelters.

**Citations Affected**

Amends 326 IAC 15-1-2 and 326 IAC 15-1-3.  
Adds 326 IAC 20-13.

**Affected Persons**

Secondary lead smelters and surrounding communities.

**Potential Cost**

Low. The rule amendments and new rule do not require additional emission controls beyond what sources have implemented to date.

**Description**

Section 112 of the Clean Air Act Amendments of 1990 requires that the United States Environmental Protection Agency (U.S. EPA) develop regulations for the control of hazardous air pollutant emissions from major and area sources of these pollutants. On June 23, 1995, U.S. EPA promulgated the national emission standards for hazardous air pollutants (NESHAP) for secondary lead smelters. The final federal rule was published at 60 FR 32587

and amendments were published at 62 FR 32209 on June 13, 1997.

Secondary lead smelters recycle lead from various sources and produce lead materials to be used in the manufacture of new products. Spent lead-acid batteries and other materials are processed to separate lead-bearing materials that are melted in furnaces to recover usable lead. The primary hazardous air pollutant emitted at secondary lead smelters is lead, in the form of dust or particulate matter. The lead emissions are present in the exhaust gases from the furnaces, dust generated during the processing of the lead-bearing materials and the smelting process, and fugitive dust that may be present on paved areas. Exposure to lead can occur through inhalation of lead particles or the ingestion of contaminated food, water, or nonfood materials such as soil. While lead affects many systems of the human body, the most sensitive systems include the blood-forming, renal, and nervous systems. Lead contamination is particularly dangerous for children six years old and younger.

Indiana rules already regulate the emissions of lead from certain of these facilities. In fact, in some respects, Indiana's rules are more effective at reducing emissions of lead than the federal requirements. IDEM's goal for this rulemaking is to provide a consistent set of standards for all secondary lead smelters in

Indiana that meet the most protective requirements of both the state and federal law.

Indiana has two secondary lead smelters that are currently operating and are or would be affected by this rulemaking action: Quemetco, Incorporated (Quemetco), in Marion County and Exide Corporation (Exide) in Delaware County. A third secondary lead smelter in Indiana is Refined Metals of Indianapolis located in Marion County; this source is not currently operating. Both Exide and Quemetco currently operate with very low lead emissions, significantly lower than the standards contained in U.S. EPA's national rule. Ambient lead levels are well within state and federal standards at all monitoring locations.

#### State Requirements

Lead emissions at Quemetco are currently regulated under 326 IAC 15, Lead Rules. The lead emission limitations under Article 15 were established as part of Indiana's state implementation plan for attaining and maintaining the health-based air quality standard for lead. Currently, the Refined Metals site is the only secondary lead smelter within a lead nonattainment area, however this source is not currently in operation. General requirements under Article 15 include emission limitations, requirements for continuous opacity monitors, use of high efficiency particulate air filters, and ambient air quality monitoring. Exide is not currently regulated under Article 15, but would be regulated under the federal rule.

#### Federal Requirements

The federal rule and amendments establish emission limits for lead and total hydrocarbons from secondary lead smelter process sources. These emission limits apply to the emissions from furnaces, including blast, reverberatory, rotary, or electric smelting furnaces. In addition to stack limits, the rule includes limits on the emissions from process fugitive emission sources and fugitive dust sources. Process fugitive emission sources include furnace and dryer charging hoppers, chutes, lead and slag taps and molds, refining kettles, dryer transition

pieces and agglomerating furnace product taps. Fugitive dust sources include plant roadways, battery breaking areas, furnace areas, refining and casting areas and materials storage and handling areas. The final federal rule also establishes work practice standards, monitoring requirements, and other requirements specific to secondary lead smelters.

#### This Rulemaking

Some of the limitations in the final federal rule are not as stringent as current state requirements for Quemetco. IDEM proposes to maintain the stringency of the limitations from Article 15 in the new rule and retain state lead emission standards rather than incorporating the emission standards from the final federal rule.

IDEM is proposing that there be a single set of lead emission limits that apply to any secondary lead smelter located in the state. Thus, the emission limitations for lead that will apply to Quemetco would also apply to Exide. Since both facilities are currently well controlled, stack test results indicate that these limitations are achievable without any additional emission control equipment. The emission limitations for several of the stacks at Quemetco are higher than the emission limitations in Article 15, however these stacks only account for approximately 15% of Quemetco's total emissions. In the event that a new secondary lead smelter would be constructed in Indiana after the effective date of this rule, a new section has been added to address new secondary lead smelters and includes the same limitations that apply to Quemetco and Exide.

Besides the emission limitations, IDEM also proposes to maintain the requirement to use high efficiency particulate air filters for certain processes. The high efficiency particulate air filter requirement already applies to Quemetco and the requirement would also apply to any new secondary lead smelter. In addition, the opacity limitations for Quemetco under Article 15 have been modified and are now included as a requirement for all secondary lead smelters. Opacity is one of the best indicators that control

systems are working properly. One of the modifications to the opacity limitations and associated requirements is the deletion of the requirement to install and maintain a continuous opacity monitor. One of the federal provisions that is being incorporated in the new rule requires the sources to either have a bag leak detection system for the baghouses that must be operated continuously or install high efficiency particulate air filters. IDEM believes that these requirements eliminate the need for the continuous opacity monitor and will result in the detection of possible problems before continuous opacity monitor data would indicate a problem.

IDEM is also proposing that secondary lead smelters should be required to install and operate ambient air quality monitors. The existing secondary lead smelters in Indiana operate ambient air monitors, either through existing requirements or on a voluntary basis. IDEM believes that the draft rule incorporates limitations and requirements that subject similar sources to similar requirements and provides for a level of control that protects air quality and public health without undue burden on the affected sources. IDEM has discussed the draft rule requirements with the affected sources and will continue to work with the affected sources and other interested parties on issues related to this rule.

#### **Consideration of Factors Outlined in Indiana Code 13-14-8-4**

Indiana Code 13-14-8-4 requires that in adopting rules and establishing standards, the board shall take into account the following:

- 1) All existing physical conditions and the character of the area affected.
- 2) Past, present, and probable future uses of the area, including the character of the uses of surrounding areas.
- 3) Zoning classifications.
- 4) The nature of the existing air quality or existing water quality, as appropriate.
- 5) Technical feasibility, including the quality conditions that could be reasonably be achieved through coordinated control of all factors affecting the quality.

6) Economic reasonableness of measuring or reducing any particular type of pollution.

7) The right of all persons to an environment sufficiently uncontaminated as not to be injurious to:

- (A) human, plant animal, or aquatic life; or
- (B) the reasonable enjoyment of life and property.

#### **Consistency with Federal Requirements**

The new and amended rules are consistent with federal rules.

#### **IDEM Contact**

Additional information regarding this action may be obtained by calling (800) 451-6027 (in Indiana), dial 0, and ask for Roger Letterman, Rules Development Section, Office of Air Management, (extension 2-8342) or call (317) 232-8342. Technical questions or information may be obtained by calling (800) 451-6027 (in Indiana), dial 0, and ask for Joe Saligoe, Program Planning and Policy Section, Office of Air Management, (extension 2-8342) or call (317) 233-1179.